									PC	TE	NTLA	AL F	UNE	OINC	S SO	URC	ES											Wa	ters	neds		
Project Type and Description	State Water Resources Control	CWA Section 319(h) Nonpoint	Proposition 13 (Water Quality)	Proposition 13 (Water Recycling)	CWA Section 205(j) Planning	Department of Water Resources	Proposition 13 (Flood Protection)	Proposition 13 (Urban Streams)	Proposition 13 (Groundwater Recharge)	Proposition 13 (Water Conservation)	Department of Parks and Recreation	Proposition 12 (Riparian/Riverine)	Habitat Conservation Fund	State Coastal Conservancy	Coastal Conservancy Programs	CA Wildlife Conservation Board	Proposition 12 (Riparian Habitat)	Natural Heritage Tax Credit Program	Department of Fish and Game	Fisheries Restoration Grants	NOAA	Community-based Rest. Grants	California Resources Agency	Coastal Resources Grant Program	Other potential sources	Russian/Bodega WMA	Klamath WMA	North Coast Rivers WMA	Humboldt Bay WMA	Eel River WMA	Trinity River WMA	Regionwide
Implement BMPs/Improve Water Ouality		X	X				X	X							X							X		X	X							
Rehabilitate abandoned mines to improve water quality; address abandoned mine dam falures to prevent/control sediment releases; monitor water quality downstream from abandoned mines(especially for mercury); restore riparian habitat and function to river reaches affected by mine tailings		X	X				X	X				X			X							X		X	X		A				A	
Address abandoned mine dam failures to prevent/control sediment releases in Shasta River watershed		X	X				Г	X							X							X		X	X		A					
Implement BMPs to prevent/reduce contaminated runoff from horse and cattle operations; implement pasture rotation for erosion and nutrient control; recycle agricultural waste including dairy waste to reduce pathogen and nutrient loading to surface and ground water; develop alternative stock watering systems including pond development; construct livestock fencing to protect riparian areas		X	X									X	X		X		X			X		X		X	X	A	A	A	A		A	A
Implement agricultural practices to reduce pesticides in surface waters		X	X					X							X							X		X	X							A
Recycle agricultural waste including dairy waste to reduce pathogen and		X	X					X							X							X		X	X							

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nutrient loading to surface and ground																							A				l		
water Implementation of a program to reduce runoff discharges from residential, commercial, and industrial properties and improve stream habitat in a mixed		X	X				X	X						X				2	ζ	X	X	_	A						
cultural/environmental justice setting (Rosaland Creek) Wetland "polishing marsh for storm		X	v				X	X						X					7	N/	X								
water runoff from Sebastopol		A	X				A	Λ						A			- 1	4	(X	Α		A				l		
Coordinate permitting efforts and/or streamline permit process for restoration projects		X	X					X						X				2	(X	X								A
Implement techinical TMDLs in cooperative efforts with private and federal landowners		X	X				X	X						X				2	ζ	X	X								A
Implement forest fuels reduction management		X	X					X						X				2	ζ	X	X			A	A			A	
Decommission, upgrade, storm proof, restore and maintain roads for erosion control to reduce sediment loading		X	X					X						X					ζ	X	X				A	A	A		
Conduct parking lot storm water management including porous pavement projects		X	X				X	X						X					(X	X								A
Road erosion control under powerlines, secure utility easement access		X	X					X						X				2	K	X	X								A
Use erosion control BMPs in developing and maintaining hiking trails		X	X											X					ζ	X	X								A
Convert septic systems to sewer systems, develop filtration system for sediment trapping and water re-use in Bodega Bay		X	X				X	X						X				2	(X	X		A						
Implement management practices to reduce off-site movement of NPS pollution in urban areas		X	X				X	X						X				2	ζ.	X	X								A
Protect, restore, and enhance urban streams including but not limited to the use of greenbelts, day-lighting, riparian restoration, buffer zones, and wetlands creation for storage and attenuation		X	X				X	X						X				2	(X	X								A
Habitat Restoration/Beneficial Use Enhancement		X	X				X	X	X		X	X		X	X		X	2	(X	X					A			A
Protect/restore/enhance historic flood plains		X	X				X	X	X		X	X		X	X		X	7	(X	X								A
i e													-				_		_	_		- 1					$\overline{}$		

Stream restoration, road restoration/retirement or other erosion/sedimentation reduction activities, especially where TMDLs are established	X	X			X	X	X		X	X	X	X		X	2		X	X					A
Develop and implement BMPs for noxious weed control in water ways and/or control of invasive plant species	X	X				X			X	X	X	X		X	2	(X	X					A
Implement riparian revegetation and stream canopy enhancement using native plants	X	X				X			X	X	X	X		X	2		X	X					A
Riparian revegetation, channel protection and animal exclusion zones as set forth in an approved technical TMDL	X	X				X			X	X	X	X	X	X	7		X	X		A	A		
Install streambank stablization and restoration measures including bioengineering	X	X			K	X	X		X	X	X	X	X	X	2	ζ	X	X					A
Large woody debris (LWD) recruitment and placement, and protection of LWD recruitment areas to create fish habitat	X	X				X			X	X	X	X	X	X)		X	X					A
Install fish screens on diversion outlets	X	X				X			X	X	X	X	X	X	2		X						A
Remove fish migration barriers	X	X				X			X	X	X	X	X	X	2	(X	X					A
Identify, protect and enhance salmonid refugia in streams	X	X				X			X	X	X	X	X	X	2	K	X	X					A
Laguna wetland corridor restoration and wetland bank and provide sediment(nutrient) removal from the tributaries to the Laguna de Santa Rosa	X	X			X.	X	X		X	X	X	X	X	X	7		X	X		A			
Re-create wetlands in flood prone areas and freshwater portions of upper tidal and low gradient channels of coastal streams	X	X			X	X	X		X	X	X	X	X	X	2	(X	X					A
Protect, restore, and enhance wetlands, riparian areas, estuaries and adjacent lands. Restore fluvial processes in wetland areas	X	X			X	X	X		X	X	X	X	X	X	2	K	X	X					A
																			. –				
Assess loadings and impacts			X	X	X .			X			X						X	X				_	
Evaluate wildlife health in estuaries due to cumulative effects from the watershed				X	K			X			X						X	X					A
Evaluate hydrological connections between estuaries, wetlands and streams			X	X	X			X			X						X	X					A

Temperature modeling to predict impacts of different riparian land use for Garcia River			X		X			X						X	X			A			
Inventory of surface and ground water withdrawals for agricultural and upland areas		X	X	X	X			X						X	X						A
Assessments and inventories of roads as sediment sources to streams in watersheds where sediment TMDLs are established or are pending in the next five years		X	X	X	X			X						X	X						A
Assess watershed cumulative effects of THPs		X	X	X	X			X						X	X						A
Evaluate and monitor urban storm water runoff, research control measure for future implementation plan to reduce storm water pollutants in Foss Creek		X	X	X	X			X						X	X	A					
Develop GIS map layers of sediment sources in Freshwater Creek and Elk River			X	X				X						X	X				A		
Identify sources of HVOCs in Santa Rosa Creek		X	X	X	X			X			X		X	X	X	A					
Assessments and inventories of roads (logging, rural and residential) as sediment sources to streams, and recommendations for implementation of road improvement projects		X	X	X	X			X				_		X	X						A
Conduct water quality assessment for salmonid restoration		X	X					X			X		X	X	X						A
Conduct water quality assessment for salmonid restoration in the Mad River and tributaries		X	X					X			X		X	X	X				A		
Assess, inventory and prioritize tributaries with salmonid fish passage deficiencies from Iron Gate dam to the confluence with the Trinity River, develop an ArcView watershed planning tool for all tributaries		X	X	X	X			X			X		X	X	X		A				
Assessment of natural and anthropogenic origins of aluminum		X	X	X	X			X					X	X	X	A					
Conduct habitat typing and sediment source inventories in Salmon Creek		X	X	X	X			X			X		X	X	X	A					
Conduct temperature and nutrient baseline sampling and modeling to analyze limiting water quality conditions		X	X	X	X			X						X	X						

and predict impacts of different flow																					A					
regimes Stream channel assessments			X	X	X	X		X				X		\blacksquare	X	-	X	X	X					\vdash		_
																								Ш		A
Research-oriented studies	v	v	1	v	v			1		1	ı				ĺ			v	X		1	I	1		ı	
	X	X		X	X			***							 **	_	**	X				1		┢		
Evaluate the effects of water	X	X		X	X			X							X		X	X	X					1		
impoundments (e.g. Dwinnell Reservoir) on the watershed and wildlife habitat																					A					
Evaluate the impacts of ground water	X	X		X			X	X									X	X	X							
withdrawl on streams and the effects of																								1		A
vegetation management on ground water														Щ		_								\longmapsto		
Develop mitigation standards and/or	X	X		X													X	X	X					1		
BMPs for toxics such as mercury in																								1	A	
mine tailing and aggregate mining																						ļ		₩		
Conduct a feasibility study for dam	X	X		X	 X			X										X	X	١.		١.		1		
removal												_					**		**	A		A		┢		
Conduct a feasibility study for fish	X	X		X											 X		X	X	X	١.		١.		1		
passage improvement	*7	*7		*7														V 7	X 7	A		A		┝─┼		
Develop an incentive program to reduce the use of two-stroke engines in	X	X		X														X	X					1		
reservoir and water ways																								1		A
Temperature modeling to predict	X	X		X	X													X	X					$\vdash \vdash$		
impacts of different riparian land use for	1	71		71	1													^	A	A				1		
Garcia River																				11				1		
Develop and use hydrodynamic water	X	X		X	X	X	X	X	ĺ					H		_	X	X	X							_
quality and flow models including data	1.				1			1.									**	``	12		Α			1	A	
collection for "ground truthing"																								l l		
Study to determine the effects of over-	X	X		X	X		X	X										X	X							
drafting of ground water in watershed																								1		A
areas associated with vineyard																								1		
development																								Ш		
Study/inventory and mapping of	X	X		X	X	X					X						X	X	X					1		
wetlands																				<u> </u>				Ш		A
Water Conservation and Management			X		ı			X			1			 					X		1	1		-	1	—
Ŭ.																		_				<u> </u>		\vdash		
Develop an emergency action response			X	X		X		X		l									X					1		
plan for droughts regarding salmonids and irrigation efficiencies improvement																					A			1		
planning										l														ı l		
Promote the coordination of Klamath			X		X			X			1	\vdash		H				-	X		1	<u> </u>		$\vdash \vdash$		-
River and Trinity River dam releases to			^		Α.			Λ		l									A		A			1		
maximize beneficial uses										l											A			1	Α	
does	!	1	l	1			1	l .		!			·								1	1	!			

Implement program to reduce the amount of water used by agriculture either through increased efficiencies or land acquisitions		X	K					X								X			A					
Improve irrigation tail water recovery to reduce nonpoint source pollution and water consumption		Y						X								X			A					
Pipe or line irrigation diversion ditches to increase stream flows		N	ζ.			X		X								X			Α				A	
Alternative water diversion demonstrations to reduced the impact from irrigation and non-irrigation situations		y	ζ.				X	X								X								A
Monitoring	X		2	X												X	ΙГ							
GIS map layers of sources, monitoring wells, and groundwater pollution in McMinn Contamination Area	X		2	X			X							_		X		A						
Develop self-assessment monitoring program for vineyard managers to assess cold water fisheries impacts from vineyards	X		2	X									X		X	X								A
Develop and implement a monitoring program for turbidity and suspended sediment	X		2	X												X		A						
Develop QA/QC for citizens' monitoring of bacterialogical sampling/data management	X		2	K											X	X								A
Develop and implement a monitoring program for streambed and habitat parameters	X		2	K		X							X			X		A						
Monitor urban creeks for nutrients, CTR pollutants, and bacterial loading characteristics	X		3	K		X									X	X					A			
"All party" monitoring for upslope risk assessment and mitigation effectiveness monitoring for timber harvesting	X		2	X .											X	X								A
Implement flow monitoring and availability of flow gauges	X		2	K	X	X		X					1			X				Ī				A
Conduct bacteriological sampling in summer recreation areas including ocean beaches with emphasis on QA/QC	X		2	K									ĺ		X	X		A		İ		A		A
Baseline monitoring for water quality to include bacteria, oil, grease, fuels, nutrients, sediment/turbudity, storm	X		2	X											X	X								

water and waste water, and fish,				1																			1	A
macroinvertebrate, and shellfish																								
populations in coastal estuaries and																								
streams																								
Water quality monitoring for TMDL		X			X												X	X						
implementation including																								
reference/control subwatershed																								
monitoring, and effects on salmonids																								A
where the TMDL is for temperature or																								
sediment																								
Monitor the effectiveness of existing		X			X												X	X						
regulatory programs (ACOE, DFG,																								
CDF, USFS, counties, etc.) to prevent																								Α
the loss of wetlands and riparian habitat																								
and degradation of water quality																								
Monitor ground water quality for		X			X		X		1									X						
constituents not currently being																								
monitored, such as pesticides, including																								Α
small, private wells																								
Effectiveness monitoring of		X			X				1									X						
implementation projects and activities to																								
determine impacts on aquatic species																								Α
and other beneficial uses																								
Implement and utilize citizens'		X			X				1								X	X						
monitoring or establish a volunteer																								
monitoring network to track																								Α
effectiveness of management measures																								
and establish baseline conditions																								
Monitor turbidity, suspended solids,		X			X												X	X						
sediment loading and pesticides																								Α
Sediment and stream channel monitoring		X			X				1							_	X	X						
including Vstar		1.			**												•	28						Α
Promote self-monitoring for nutrients	-	X			X	-			1					-	_	_	X	X						
and sediment from dairies		1.			**												•	28	A			A		
Conduct trend monitoring for water	-	X			X	-			1					-	_	_	X	X						_
quality, temperature macroinvertibrates,					**												•	2 .		A			Α	
riparian habitat, gravel quality etc.																				1.				
inpurium muorum, graver quantey eve.						- 1							l						1		-1	1	 	
Education and Outreach		X	X	Ī														X		1				\neg
Salmonid habitat/aquatic species		X	X			1		1										X		1				=
education for agencies, organizations,																								Α
landowners and private organizations																								
Bioengineering education for agencies,		X	X						1				H					X				1		=
organizations, landowners and private		1	41															11						Α
organizations								1																
0.50							_!	1		 	-									I		1		

Heavy equipment operation training for restoration and road work, and technology transfer to organizations and landowners Landowner outreach and education for road decommissioning/storm-proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals (diversions) from tributaries;	A
technology transfer to organizations and landowners Landowner outreach and education for road decommissioning/storm-proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals	A
landowners Landowner outreach and education for road decommissioning/storm-proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals	
landowners Landowner outreach and education for road decommissioning/storm-proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals	
Landowner outreach and education for road decommissioning/storm-proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals	
road decommissioning/storm- proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals	+-
proofing/maintanence Stakeholder education and outreach on cumulative effects of water withdrawals X X X X X X X X X X X X X X X X X X X	
Stakeholder education and outreach on cumulative effects of water withdrawals	A
cumulative effects of water withdrawals	₽
(diversions) from tributaries;	A
Training for fire managers for water X X X X X X X X X X X X X X X X X X X	
quality protection	A
Burn Area Emergency Rehabilitation X X	
	١.
technology transfer	A
Provide education and outreach to urban X X X X X X X X X X X X X X X X X X X	1
citizens and stream side property owners	1
on nonpoint source pollution, especially	A
from septic systems and pesticide and	
fertilizer use	
"Shrimp Club" type X X X	┼─
	١.
education/outreach/restoration	A
Technology transfer for vineyard X X X	
installation, education and outreach;	
changes to BMPs and innovative	
technology for vineyards on slopes	
>30% and adjacent to water courses	
Form partnerships with public agencies, XXX	†
organizations, and stakeholders to plan,	
	A
implement, and monitor projects	↓
Implement a nonpoint source public X X X X X X X X X X X	
outreach program addressing the	
requirements of Phase II NPDES storm	
water permits	
Watershed Planning X X	T
Watershed Management Plan for X X	\leftarrow
Americano Creek A	ـــــ
Watershed planning and assessment X X X	1
using an adaptive management approach	1
that may include compilation of existing	1
data, GIS development, assessment	Α
monitoring, historic and current land	
use, habitat typing, sediment source	1
	1
evaluation, stream bank and upslope	1
Jorogram control road inventories ground	1
erosion control, road inventories, ground water analysis, hydrological budget,	

urban runoff, economic analysis, prioritization of recommended implementation projects, and a strategy to achieve implementation																						
Develop regional watershed group networks			X											X		X						Α
Monitoring, TMDL development and implementation planning			X													X			A			A
Develop a restoration plan that incorporates the TMDL and the North Coast Watershed Assessment in the Big River			X											X		X	Ī		A			
Collect and provide information to revise TMDL for EPA approval, revise Enhancement Plan for Stemple Creek			X													X		A				
Land Acquisition		X			X	X	X	X	X	X		X				X						
Land acquisition for growing trees for riparian canopy and irrigation water use, habitat improvement, preservation and restoration and for a buffer from adjacent land use		X			X	X	X	X	X	X		X				X		A	A		A	
Acquisitions of conservation easements, fee title lands and trusts to prevent surface water quality degradation from timber harvest, urban development, and agricultural activities		X			X	X	X	X	X	X		X				X	-					A
Land acquisition/easements for road decommissioning in Big River and Jenner Creek		X			X	X	X	X	X	X	Ī	X				X		A	A			
Land acquisition/easements to protect and restore riparian areas		X			X	X	X	X	X	X		X				X						